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CLAIMS

1. The method of manufacturing of 7-ethyl-10-hydroxy- camptothecin of formula I

HO
$$CH_3$$
 OH CH_3

characterized in that 7-ethyl-1,2,6,7-tetrahydrocamptothecin of formula IV

is oxidized with iodobenzene diacetate in acetic acid and in the presence of water under the conditions consisting in that iodobenzene diacetate is used in an amount of 0.99 to 1.85 mol per 1 mol of 7-ethyl-1,2,6,7-tetrahydrocamptothecin, acetic acid is used in an amount of 668 to 1001 mol per 1 mol of 7-ethyl-1,2,6,7-tetrahydrocamptothecin, water is used in an amount of 980 1880 to mol per 1 mol of 7-ethyl-1,2,6,7-tetrahydrocamptothecin and the oxidation carried out at a temperature from 15 to 30 °C for 5 to 30 minutes.

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2. The method according to claim 1, characterized in that the starting 7-ethyl-1,2,6,7-tetrahydrocamptothecin is obtained by hydrogenation of 7-ethylcamptothecin of formula II

in a saturated aliphatic monocarboxylic acid having 1 to 3 carbon atoms, using hydrogen in the presence of a hydrogenation catalyst and a sulfur compound that partly deactivates the hydrogenation catalyst.

- 3. The method according to claim 2, characterized in that the saturated aliphatic acid is formic acid, acetic acid or trifluoroacetic acid.
- 4. The method according to claim 3, characterized in that acetic acid is used in an amount of 791 to 1187 mol, preferably 890 to 1088 ml, per 1 mol of 7-ethylcamptothecin.
- 5. The method according to claim 2, characterized in that the sulfur compound that partly deactivates the hydrogenation catalyst is dimethyl sulfoxide.
- 6. The method according to claim 5, characterized in that dimethyl sulfoxide is used in an amount of 0,18 to 0,33, preferably 0,23 to 0,28 ml, per 1 mol of 7-ethylcamptothecin.

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- 7. The method according to claim 2, characterized in that the hydrogenation catalyst is a noble metal.
- 8. The method according to claim 7 characterized in that the noble metal is platinum.
- 9. The method according to claim 8, characterized in that platinum is used on an activated carbon or aluminium oxide carrier.
- 10. The method according to claim 9, characterized in that platinum is used in an amount of 0,018 to 0,027 mol, preferably 0,020 to 0,025 mol, per 1 mol of 7-ethylcamptothecin, in form of a hydrogenation catalyst, formed by platinum on an activated carbon with platinum content 5 %.
- 11. The method according to claim 2 characterized in that the hydrogenation is carried out at a pressure from 0,3 to 0,7 MPa, preferably at a pressure from 0,4 to 0,6 MPa.
- 12. The method according to claim 11, characterized in that the hydrogenation is carried out at a temperature from 45 to 85 °C, preferably at 58 to 72 °C.
- 13. The method according to claim 11, characterized in that the hydrogenation is carried out for 24 to 70 hours, preferably for 40 to 50 hours.



